PREVIEW QUESTION BANK

Module Name : Agricultural Chemicals - 64-ENG
Exam Date : 29-Jun-2024 Batch : 14:30-16:30

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	201	Movement of DNA from one bacterium to another through a tubular bridge or pilus: 1. Conjugation 2. Transposition 3. Transfection 4. Transduction A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	202	Which of the following is responsible for eliminating toxic oxygen by-products from cells? 1. Mitochondria 2. Golgi complex 3. Peroxisomes 4. Chloroplasts A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
3	203	A form of multiple parasitism in which a parasite preferentially attacks a host that is already parasitized by another species is known as 1. Cleptoparasitism 2. Ectoparasitoid 3. Obligate parasitism 4. Superparasitism A1 : 1	4.0	1.00

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		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
4	204	For mass multiplication of DD-136 nematode, the common host used is 1. Silk moth 2. Fruit sucking moth 3. Codling moth 4. Lesser wax moth A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
5	205	Chlorpyriphos methyl is effective against stored product insects except 1. *Rhizopertha dominica* 2. *Tribolium castaneum* 3. *Caryedon serratus* 4. *Oryzaephilus surinamensis* A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
6	206	Which of the following insects often cause inhalational allergies in human following large emergence of adult insects 1. Stick insects 2. May flies 3. Ear wigs 4. Preying mantis A1 : 1 A2 : 2	4.0	1.00

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		A3 : 3 A4 : 4		
Objective Question				
7	207	Given below are two statements: Statement (I): Climate is a weather condition related to smaller areas at a given place and at a given time, Statement (II): Weather is a condition of atmosphere at a given place and at a given time In light of the above statements, choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
8	208	The local name of cyclone in Phillippines is 1. Hurricane 2. Cyclone 3. Baquio 4. Typhoon A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
9	209		4.0	1.00

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		Which one of the following are secondary tillage implements? (A).Subsoiler (B).Cultivator (C).Disc harrow (D).Wetland plough Choose the ***correct*** answer from the options given below: 1. (A), (B) and (D) only. 2. (B) and (C) only. 3. (B), (C) and (D). 4. (B) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
10	210	_____ is the most suitable, drought resistant and persistant grass? 1. *Atylosia sp.* 2. *Cenchrus ciliaris* 3. *Stylosanthes hamata* 4. *Sorghum bicolor* A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
11	211	The rainfed area in India is aproximately 1. 30 mha 2. 40 mha 3. 57 mha 4. 70 mha A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
12	212	Which nutrient is often a limiting factor in agricultural production? 1. Nitrogen 2. Carbon 3. Oxygen 4. Hydrogen A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
13	213	What is a potential disadvantage of agroforestry systems? 1. Increased soil erosion 2. Decreased carbon sequestration 3. Reduced biodiversity 4. Enhanced susceptibility to pests A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
14	214	Pungency in mustard oil is due to 1. Amino acid 2. Allyl isothiocyanate 3. Erusic acid 4. Oxalic acid A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
15	215	Sesamum belongs to the family 1. Chenopodiaceae 2. Papilionaceae 3. Leguminosae 4. Pedaliaceae A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
16	216	Dark period is critical in which type of plant? 1. Short day plant 2. Long day plant 3. Day neutral plant 4. All the options A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
17	217	Which of the following is NOT a significant contributor to greenhouse gas emissions from livestock farming? 1. Carbon dioxide 2. Methane 3. Nitrous oxide 4. Ammonia A1 : 1 A2 : 2 A3 : 3	4.0	1.00

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		A4 : 4		
Objective Question				
18	218	Fe deficiency is mostly seen in crops growing on 1. Calcareous or alkaline soils 2. Salt affected soils 3. Acidic soils 4. Neutral soils A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
19	219	EDV (Essentially Derived Varieties) are those which are derived from: 1. crossing two commercially known varieties 2. hybrid introduced from other countries 3. existing variety through genetic engineering or mutation 4. crossing commercially known variety with its wild relative A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
20	220	What is the role of "companion planting" in agriculture? 1. Enhancing soil fertility through crop rotation 2. Growing different crop species together to deter pests 3. Cultivating plants in hydroponic system 4. Increasing soil compaction through cover cropping A1 : 1 A2 : 2 A3 : 3	4.0	1.00

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A4 : 4

Objective Question

21 | 2601 | 4.0 | 1.00

Given below are two statements:

Statement (I): In Indian sub-continent, about one-fifth of total geographical area is affected by drought in every 10 years.

Statement (II): In Indian sub-continent, about one-third of total geographical area is affected by drought in every 15 years.

In light of the above statements,choose the *most appropriate* answer from the options given below.

1. Both Statement (I) and Statement (II) are true.
2. Both Statement (I) and Statement (II) are false.
3. Statement (I) is true but Statement (II) is false.
4. Statement (I) is false but Statement (II) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

22 | 2602 | 4.0 | 1.00

Given below are two statements:

Statement (I): De Saussure concluded that the carbon contained by palnts was derived from the soil.

Statement (II): Sir Humphry Davy stated that plants received most of the carbon from atmoshperic air.

In light of the above statements,choose the *most appropriate* answer from the options given below.

1. Both Statement (I) and Statement (II) are true.
2. Both Statement (I) and Statement (II) are false.
3. Statement (I) is true but Statement (II) is false.
4. Statement (I) is false but Statement (II) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

23 | 2603 | 4.0 | 1.00

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		Correct sequence of states as per increasing order of plant nutrient (NPK) consumption for the year 2021-22 in 1. Maharashtra < Gujarat < Andhra Pradesh < Telangana < Haryana 2. Gujarat < Maharashtra < Haryana < Andhra Pradesh < Telangana 3. Gujarat < Maharashtra < Telangana < Andhra Pradesh < Haryana 4. Telangana < Andhra Pradesh < Gujarat < Maharashtra < Haryana A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
24	2604	The weed density in a control plot (weedy check) is 50 per sq. m and in a herbicide treated plot 35 per sq. m, calculate weed control efficiency (%). 1. 30.0 2. 42.9 3. 60.0 4. 85.7 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
25	2605	Which of the following principles of system of rice intensification (SRI) largely forced many farmers to disadopt it? (A). Young seedlings and single seedling/hill (B). Wider spacing (C). Mechanical weeding (D). Intermittent irrigation (E). Use of organic manure Choose the ***correct*** answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (C) and (E) only. 3. (B), (C) and (D) only. 4. (B), (D) and (E) only.	4.0	1.00

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		A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
26	2606	Which among the followings is not the characteristic of the durum wheat? 1. Blades of the durum wheat leaves are usually narrower than those of bread wheat. 2. Durum wheat kernels are harder and heavier than bread wheat. 3. Durum wheat kernels are typically larger than that of bread wheat. 4. The dough of durum wheat is less elastic than the bread wheat. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
27	2607	Topping and de-suckering are not practised generally for which type of tobacco? 1. Chewing tobacco 2. Cigar tobacco 3. Wrapper tobacco 4. *Bidi* tobacco A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
28	2608	The operational range for electrical resistance block is 1. 0 to -0.85 bars 2. 0 to -100 bars 3. 0.5 to -50 bars 4. -0.1 to -15 bars A1 : 1	4.0	1.00

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		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
29	2609	Calculate the seed rate of rice in kg/La , if the spacing of hills for transplanting is 20cm x 20cm ; number of seedings / hill is 2; germination percentage of seeds is 90; purity percentage of seeds is 90; test weight of rice seed is 25 g; damaged seedlings during uprooting from the nursery is 20% of the uprooted seedlings. 1. 15.4 2. 18.5 3. 9.6 4. 19.3 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
30	2610	The term variance is used to denote: 1. Standard deviation 2. Square of the standard deviation 3. Square root of the standard deviation 4. Average of differences from the mean A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
31	2611	Which of the following types of tobacco has highest nicotine content? 1. *Bidi* tobacco 2. Cigar tobacco 3. Chewing tobacco 4. Cigar wrapper tobacco	4.0	1.00

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		A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
32	2612	What is the field water-use efficiency in kg/ha-mm of wheat crop, if it yields 4.5 t/ha grain and water requirement is 45 cm? 1. 0.1 2. 10 3. 100 4. 1000 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
33	2613	Which experimental design is a single factor design? 1. Factorial RCB design 2. Split-plot design 3. Latin square design 4. Strip-plot design A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
34	2614	Which of the following agenda is not contributed by the International year of Millets 2023 to the UN 2030 Agenda for sustainable development? 1. Life on land 2. Decent work and economic growth 3. Nutrition for the most vulnerable 4. Responsible consumption and production	4.0	1.00

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		A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
35	2615	The time required to complete hydrolysis of urea when applied in normal soil and alkline soils, respectively is 1. 2-3 days in normal soil, and 4 days in alkaline soil. 2. 1-2 days in normal soil, and 5 days in alkaline soil. 3. 1-2 days in normal soil, and 10 days in alkaline soil. 4. 2-3 days in normal soil, and 7 days in alkaline soil. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
36	2616	Diagnosis and recommendation integrated system (DRIS) approach was developed by: 1. Olsen 2. Leibig 3. Beaufils 4. Arnon A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
37	2617	Clay mineral having largest specific surface area is 1. Kaolinite 2. Montmorillonite 3. Smectite 4. Illite A1 : 1	4.0	1.00

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		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
38	2618	The most dominant soil order in India is: 1. Entisol 2. Alfisol 3. Inceptisol 4. Mollisol A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
39	2619	Minerals containing iron are: (A). Hematite (B). Goethite (C). Sphalerite (D). Magnetite Choose the ***correct*** answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B), (C) and (D). 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
40	2620		4.0	1.00

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Given below are two statements:

Statement (I): Iron deficiency is most common in upland crops, particularly those grown on the calcareous/alkaline soils of arid region.

Statement (II): Molybdenum is associated with nitrogenase and nitrate reductase enzymes and is essential for nitrogen fixing plants and microorganisms.

In light of the above statements, choose the *most appropriate* answer from the options given below.

1. Both Statement (I) and Statement (II) are correct.
2. Both Statement (I) and Statement (II) are incorrect.
3. Statement (I) is correct but Statement (II) is incorrect.
4. Statement (I) is incorrect but Statement (II) is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

41	2621		4.0	1.00

Solubility of Fe(III) oxides decreases in the order:

(A). α-Fe_2O_3 (Hematite)

(B). α-FeOOH (Ggoethite)

(C). γ-Fe_2O_3 (Maghemite

(D). γ–FeOOH (Lepidocrocite)

Choose the **correct** answer from the options given below:

1. (C), (B), (A), (D).
2. (A), (B), (C), (D).
3. (B), (A), (D), (C).
4. (C), (D), (A), (B).

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

42	2622		4.0	1.00

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The production of single superphosphate (SSP) involves following operations:

(A). The powdered rock phosphate (containing 30%-38% total P_2O_5) is mixed with sulphuric acid (65%-75% H_2SO_4) to form a slurry.

(B). The wet material is subjected to final curing, when some of the slow reactions reach a state of near completion and the excess water evaporates. The curing time is 2-6 weeks.

(C). Solidification of the slurry in a den (denning), where continued reactions and crystallization of monocalcium phosphate take place (time required 0.5 to 4 hours).

(D). If granular SSP is desired, it can be granulated either before or after it is cured.

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (D) only.
2. (A), (B) and (C) only.
3. (A), (B), (C) and (D).
4. (B), (C) and (D) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

43	2623		4.0	1.00

Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A) : Dehydrogenase activity reflects the total range of the oxidative activity of soil microorganisms and may be considered a good indicator of the oxidative metabolism in soils.

Reason (R) : Dehydrogenase oxidizes soil organic matter by transferring protons and electrons from organic substrates to inorganic acceptors.

In light of the above statements, choose the *correct* answer from the options given below.

1. Both (A) and (R) are true and (R) is the correct explanation of (A).
2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
3. (A) is true but (R) is false.
4. (A) is false but (R) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

44	2624		4.0	1.00

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Most weathered soil order is

1. Inceptisols
2. Vertisols
3. Oxisols
4. Alfisols

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

45 2625 4.0 1.00

Match **List-I** with **List-II**

List-I	**List-II**
(Nutrient element)	**(Enzymes)**
(A). Copper	(I). Nitrogenase and nitrate reductase
(B). Iron	(II). Ascorbic acid oxidase and polyphenol oxidase
(C). Zinc	(III). Catalase and peroxidase
(D). Molybdenum	(IV). Carbonic anhydrase and dehydrogenase

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
3. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

46 2626 4.0 1.00

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		Calcium requirement is highest for: 1. Cereals 2. Legumes 3. Oil seeds 4. Forage crops A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
47	2627	Nicotine is found in tobacco plant and it is used as insecticide. It is a 1. Limonoid 2. Terpenoid 3. Carotenoid 4. Alkaloid A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
48	2628	Beardeaux mixture composed of 1. $CaSO_4$ and CuO 2. $CuSO_4$ and CuO 3. $CuSO_4$ and CaO 4. $CaSO_4$ and CaO A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
49	2629		4.0	1.00

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		Imazethapyr is a 1. Selective broad spectrum herbicide 2. Non-selective broad spectrum herbicide 3. Selective herbicide for grasses 4. Selective herbicide for broad leaves A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
50	2630	Ideal range of absorbance for accepting data from spectrophotometer is 1. 0.1-0.5 2. 0-1 3. 0.2-1.5 4. 0.2-0.8 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
51	2631	Jasmolin is found in which of the following plant 1. *Tinospora sp.* 2. *Gimnema sp.* 3. *Anthocephalas sp.* 4. *Tanacetum sp.* A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
52	2632		4.0	1.00

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		Essential oil is mainly comprised of 1. Monoterpenes 2. Diterpenes 3. Limonins 4. Acetogenins A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
53	2633	Pungent principle of chilli is 1. Capxanthin 2. Capsaicin 3. Chalcone 4. Capsirubin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
54	2634	EW formulation of pesticide is a 1. Emulsion 2. Solution 3. Colloid 4. Suspension A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
55	2635		4.0	1.00

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		"Matador" is the trade name of which herbicide ? 1. Metsulfuron-methyl 2. Metribuzin 3. Sulfosulfuron 4. Glyphosate A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
56	2636	Solution of 2% concentration is equivalent to 1. 200 ppm 2. 2000 ppm 3. 20000 ppm 4. 200000 ppm A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
57	2637	Quality Protein Maize (QPM) is richer in which of the following amino acid than normal maize ? 1. Lysine and Glycine 2. Glycine and Aspartic acid 3. Lysine and Tryptophan 4. Histidine and Proline A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
58	2638		4.0	1.00

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		CIB&RC is a Govt. body located at 1. Ghazhibad 2. Faridabad 3. Delhi 4. Gurugram A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
59	2639	The estimated total utilizable surface water resources of India is 1. 433 BCM 2. 690 BCM 3. 1123 BCM 4. 4000 BCM A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
60	2640	Given below are two statements: Statement (I): The slope of mass curve shows the intensities at various time intervals in a storm. Statement (II): Hyetograph is derived from the mass curve. In light of the above statements,choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are true. 2. Both Statement (I) and Statement (II) are false. 3. Statement (I) is true but Statement (II) is false. 4. Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2 A3 : 3	4.0	1.00

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		A4 : 4		
Objective Question				
61	2641	Given below are two statements related to peak rate of runoff: Statement (I): The factors related to retardance to flow caused by the effect of surface detention and channel storage considered. Statement (II): The runoff coefficient is dependent only on watershed characteristics. In light of the above statements,choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are true. 2. Both Statement (I) and Statement (II) are false. 3. Statement (I) is true but Statement (II) is false. 4. Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
62	2642	Soil moisture tension in a salt free soil at field capacity depending on soil texture ranges from 1. 7 to 32 atmosphere 2. 0.7 to 7 atmosphere 3. 0.01 to 0.7 atmosphere 4. < 0.01 atmosphere A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
63	2643	Surangam, water harvesting structures are found in 1. Bellary 2. Tamil Nadu 3. Kasargod 4. Telangana A1 : 1	4.0	1.00

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		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
64	2644	Which of the following is a traditional rainwater harvesting technique practiced in rainfed agriculture? 1. Desalination 2. Drip irrigation 3. Contour bunding 4. Sprinkler irrigation A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
65	2645	Which of the following irrigation scheduling methods relies on soil moisture measurements to determine when irrigation is needed? 1. Calendar-based scheduling 2. Crop water stress index (CWSI) 3. Pan evaporation method 4. Soil moisture sensors A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
66	2646	What is the term used to describe the process of using vegetation to enhance water drainage and stabilize soil in agricultural landscapes? 1. Terracing 2. Riparian buffers 3. Vegetative filter strips 4. Subsurface drains A1 : 1	4.0	1.00

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		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
67	2647	Which factor is NOT a consideration in groundwater management? 1. Rate of groundwater recharge 2. Extraction rate 3. Depth of the water table 4. Surface water availability A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
68	2648	What is the term used to describe the process of lowering the water table around a well due to excessive pumping, resulting in reduced water availability? 1. Aquifer depletion 2. Cone of depression 3. Pumping efficiency 4. Hydraulic fracturing A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
69	2649	What is the primary advantage of pressurized irrigation systems over traditional gravity-based systems? 1. Reduced water use 2. Lower initial investment 3. Higher application efficiency 4. Greater flexibility in crop selection A1 : 1 A2 : 2	4.0	1.00

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A3 : 3

A4 : 4

Objective Question

70 | 2650 | 4.0 | 1.00

What is the term used to describe the process of using plants to remove pollutants from soil and water?

1. Phyto sorption
2. Phytoextraction
3. Phytoremediation
4. Phyto stabilization

A1 : 1

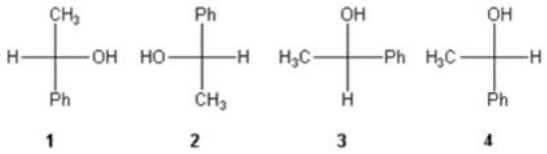
A2 : 2

A3 : 3

A4 : 4

Objective Question

71 | 1003301 | 4.0 | 1.00



1 2 3 4

Which of the above Fischer projection is different from other three ?

1. 1
2. 2
3. 3
4. 4

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

72 | 1003302 | 4.0 | 1.00

Who invented the pH scale?

1. S.P.L Sorenson
2. Benjamin Franklin
3. Henry Moseley
4. Wilhelm Rontgen

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		A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
73	1003303	Which of the following polymer is a homopolymer? 1. Bakelite 2. Nylon-66 3. Terylene 4. Neoprene A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
74	1003304	D-glucosamine is the monomer of which of the following biopolymer ? 1. Pectin 2. Alginic acid 3. Inulin 4. Chitin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
75	1003305	Sinigrin is available in mustard and other cruciferous plants. Chemically it is best classified as : 1. Flavonoid 2. Carotenoid 3. Glycoside 4. Saponin	4.0	1.00

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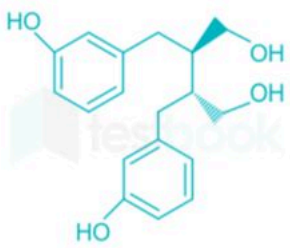
A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

76	1003306	 Above structure is of enterodiol. It belongs to which of the following group of compound ? 1. Terpene 2. Steroid 3. Lignan 4. Alkaloid A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

77	1003307	Which is not the characteristic feature of alkaloid ? 1. Complex molecular structure and nitrogen in the molecule 2. Acidic in nature only 3. Biosynthetically derived 4. It may contain hetero atom other than N A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

78	1003308		4.0	1.00

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		What will be the concentration if 0.1 mg cypermethrin is dissolved in 0.1 L of acetone ? 1. 0.01 ppm 2. 0.1 ppm 3. 1 ppm 4. 10 ppm A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
79	1003309	Unit of NOAEL (No-observed adverse effect level) is 1. mg kg^{-1} bw day^{-1} 2. mg kg^{-1} bw 3. mg day^{-1} 4. g kg^{-1} day^{-1} A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
80	1003310		4.0	1.00

Match **List-I** with **List-II**

List-I	**List-II**
(A). Theoretical plate	(I). TLC
(B). Stationary phase	(II). Chromatography
(C). Resolution	(III). Chromatographic peaks
(D). R_f	(IV). Column

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
2. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
3. (A) - (IV), (B) - (II), (C) - (III), (D) - (I)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

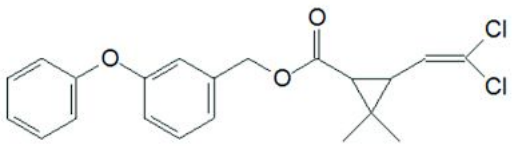
A2 : 2

A3 : 3

A4 : 4

Objective Question

81 1003311 4.0 1.00



Name of the above compound is

1. Permethrin
2. Cypermethrin
3. Deltamethrin
4. Allethrin

A1 : 1

A2 : 2

A3 : 3

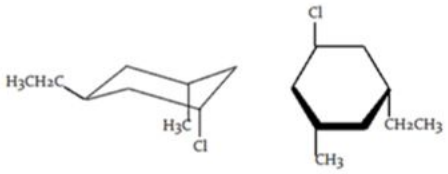
A4 : 4

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Objective Question

82	1003312	Which of the following is phthalimide derivative of tetrachloroethane sulfenyl group ? (A). Captan (B). Folpet (C). Boscalid (D). Captafol Choose the ***correct*** answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (B), (C) and (D) only. 4. (A), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

83	1003313	 What is the stereochemical relationship between two above molecules ? 1. Geometrical isomers 2. Enantiomers 3. Diastereomers 4. Identical A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

84	1003314		4.0	1.00

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		Which of the following compounds have insect controlling properties through inhibition of chitin synthesis but does not have benzoylphenylurea as its basic skeleton ? 1. Diflubenzuron 2. Novaluron 3. Triflumuron 4. Buprofezin A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
85	1003315	In QuEChERS method of clean up during pesticide residue analysis, a sorbent is used for the clean up. Sorbent is chemically 1. Primary amine 2. Secondary amine 3. Primary secondary amine 4. Primary secondary amide A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
86	1003316	Estimation of glucose, sucrose and fructose can be done by ……detector using HPLC. 1. Ultraviolet (UV) 2. Refractive index (RI) 3. Fluoroscence (FLD) 4. Photodiode array (PDA) A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				

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87	1003317	Which one of the following statements is not correct ? 1. Ultraviolet (UV) light is electromagnetic radiation with a wavelength longer than X-rays 2. Ultraviolet (UV) light is being used in laminar flow, spectrophotometer and HPLC detection 3. Short wave ultraviolet (below 280 nm) is blocked by the ozone layer 4. Short wave ultraviolet is germicidal A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
88	1003318	Lowest limit of detection (LOD) of which of the following pesticides is expected in GC-ECD ? 1. Chloropyriphos 2. Malathion 3. Carbaryl 4. Cypermethrin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
89	1003319	A solution of 10 ppm hexaconazole after GC analysis provides peak area of 121380. What will be the concentration of the unknow solution which provides peak area of 8092 ? 1. 0.5 mg L^{-1} 2. 0.67 mg L^{-1} 3. 6.7 mg L^{-1} 4. 5.0 mg L^{-1} A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

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Objective Question

90	1003320	As per good laboratory practice for HPLC, water can be used as mobile phase which should have resistivity of 1. 21.8 MΩ 2. 12.8 MΩ 3. 18.2 MΩ 4. 28.1 MΩ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

91	1003321	Number of fluorine atom present in fluconazole, an azole fungicide, is/are 1. One 2. Two 3. Three 4. Four A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

92	1003322		4.0	1.00

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Match **List-I** with **List-II**

List-I (Target)	**List-II (Compound)**
(A). Beta-tubulin in mitosis	(I). Benomyl
(B). Succinate dehyogenase	(II). Carboxin
(C). Cytochrome bc 1	(III). Picoxystrobin
(D). C14-Demethylase	(IV). Hexaconazole

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (II), (B) - (III), (C) - (I), (D) - (IV)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

93 1003323 4.0 1.00

The composition of universal antidote is

1. Charcoal, PbO, Tannic acid
2. Charcoal, CuO, Tannic acid
3. Charcoal, MgO, Tannic acid
4. Charcoal, MgO, Benzoic acid

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

94 1003324 4.0 1.00

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		Which of the following source does not have significant amount of carotenoids in it ? 1. Carrot 2. Spinach 3. Tomato 4. Black rice A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
95	1003325	Compound, 9-tricosene (Muscalure) is known to be active as.....in insect. 1. Oviposition deterrent 2. Repellent 3. Attractant 4. Antifeedant A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
96	1003326	"Paper factor" is linked with the JH activity in insect and it is due to which of the following compound ? 1. Farnesol 2. JH-11 3. Sesamex 4. Juvabione A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
97	1003327		4.0	1.00

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Which of the followings is a ethylene bisdithiocarbamate fungicide ?

1. Propineb
2. Captan
3. Triazophos
4. Binapacryl

A1 : 1

A2 : 2

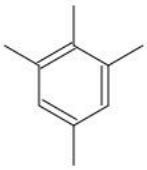
A3 : 3

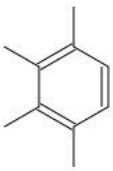
A4 : 4

Objective Question

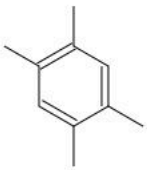
98 | 1003328 | 4.0 | 1.00

Which of the following is an organic compound having the molecular formulae $C_{10}H_{14}$ exhibited two singlets in the ^{1}H NMR spectrum and three signals in the ^{13}C NMR?

1. 

2. 

3. 

4. 

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

99	1003329	Which of the following is true about transesterification ? 1. Exchanging the organic alkyl group of alcohol with the organic group alkyl of an alkene. 2. Exchanging the organic alkyl group of an ester with the organic group alkyl of an ether. 3. Exchanging the organic alkyl group of an ester with the organic group alkyl of an alcohol. 4. Exchanging the organic alkyl group of an ester with the organic group alkyl of an alkane. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

100	1003330	Which of the following is used to prepare benzoyl chloride from benzoic acid? 1. Cl_2, H_2O 2. SO_2, Cl_2 3. $SOCl_2$ 4. Cl_2, hv A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

101	1003331		4.0	1.00

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Match **List-I** with **List-II**

List-I	**List-II**
(A). Isoproturon	(I). Insecticide
(B). Fenitrothion	(II). Chitin synthesis inhibitor
(C). Diflubenzuron	(III). Herbicide
(D). Triademefon	(IV). Fungicide

Choose the **correct** answer from the options given below:

1. (A) - (IV), (B) - (II), (C) - (III), (D) - (I)
2. (A) - (III), (B) - (II), (C) - (I), (D) - (IV)
3. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
4. (A) - (III), (B) - (I), (C) - (II), (D) - (IV)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

102 | 1003332 | 4.0 | 1.00

In chromatographic tandem techniques, MRM means

1. Minimal reaction monitoring
2. Multiple reaction monitoring
3. Multiple reaction measurement
4. Multiple run monitoring

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

103 | 1003333 | 4.0 | 1.00

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		Increase in pressure will increase the boiling point of the solvent. The principle is followed in 1. Rotary vacuum evaporator 2. Accelerated solvent extractor 3. Supercritical fluid extractor 4. Soxhlet extractor A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
104	1003334	n-octanol/water partition coefficient (K_{OW}) is..... where, $[X]_0$= concentration of compound in octanol and $[X]_w$ = concentration of compound in water. 1. $K_{OW} = [X]_o/[X]_w$ 2. $K_{OW} = [X]_w/[X]_o$ 3. $K_{OW} = [X]_o \times [X]_w$ 4. $K_{OW} = 1/([X]_o \times [X]_w)$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
105	1003335	Nobel laureaute E.J. Corey, employed the Barton reaction in the synthesis of Azadiradione. Azadiradione is a 1. Alkaloid 2. Limonoid 3. Steroid 4. Lignin A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
106	1003336		4.0	1.00

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Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A) : Nitration of benzaldehyde gives m-nitro benzaldehyde.

Reason (R) : Formyl group increases the electron density on the ring at meta position.

In light of the above statements, choose the *correct* answer from the options given below.

1. Both (A) and (R) are true
2. Both (A) and (R) are not true
3. (A) is true but (R) is false.
4. (A) is false but (R) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

107	1003337	Reaction between alkene and acetophenone derivative in hexane in the presence of light produces oxetane derivative. Which reaction is this ? 1. Wittig reaction 2. Diels-Alder reaction 3. Kolbes reaction 4. Paterno Buchi reaction A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

108	1003338	In NMR, protons that are involved in hydrogen bonding (i.e.-OH or -NH) are usually observed over a wide range of chemical shifts. This is due to the deshielding that occurs in the hydrogen bond. Since hydrogen bonds are dynamic, constantly forming, breaking and forming again, there will be a wide range of hydrogen bonds strengths and consequently a wide range of deshielding. Thus experimentally -OH and -NH can be identified by carrying out 1. Repeat experiment 2. D_2O exchange 3. Changing deuterated solvent 4. Can not be determined A1 : 1	4.0	1.00

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		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
109	1003339	Orbitrap technology is mainly used for the determination purpose of 1. Accurate mass 2. Accurate fragmentation 3. Accurate adduct 4. Accurate daughter ion A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
110	1003340	Which one the following statements is not correct about carotenoids ? 1. They are produced from 8 isoprene molecules. 2. Usually lipophilic due to the presence of long unsaturated aliphatic chains. 3. Absorb wavelengths ranging from 400-550 nm. 4. Belongs to the category of triterpenoids. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
111	1003341		4.0	1.00

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		NOAEL value of three pesticides are as follows: X=0.07 mg kg^{-1} body weight Y= 0.7 mg kg^{-1} body weight Z = 0.007 mg kg^{-1} body weight Rank the pesticides based of safety with safest first and least safe last 1. X > Z > Y 2. X > Y >Z 3. Y > X > Z 4. Z > Y > X A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
112	1003342	A student was preparing standard solution of imidacloprid by dissolving 10 mg of compound in 1 ml solvent and further diluting 1000 times. What is the concentration of the solution? 1. 1 ppb 2. 10 ppb 3. 10 ppm 4. 1 ppm A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
113	1003343	A sweetener used in sugarless gums and candies is 1. Xylitol 2. Glucose 3. Sucrose 4. Resveratrol A1 : 1 A2 : 2	4.0	1.00

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A3 : 3

A4 : 4

Objective Question

114 | 1003344 | 4.0 | 1.00

Match **List-I** with **List-II**

List-I	**List-II**
(A). Plant Quarantine Order	(I). 2003
(B). Destructive Insect Pest Act	(II). 1971
(C). Insecticide Rule	(III). 1914
(D). FSSAI Establishment	(IV). 2008

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (II), (B) - (III), (C) - (I), (D) - (IV)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

115 | 1003345 | 4.0 | 1.00

Deformities resulting from abnormalities of embryonic development is related to adverse effect of pesticides. The effect is generally observed in fluorinated pesticides. The effect is known to be

1. Carcinogenecity
2. Tetratogenecity
3. Mutagenicity
4. Acute toxicity

A1 : 1

A2 : 2

A3 : 3

A4 : 4

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Objective Question

116	1003346	Hemicellulose is composed of 1. Uronic acids and pentoses 2. Uronic acids and hexoses 3. Only pentoses 4. Only hexoses A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

117	1003347	Which of the following pesticide have "I" in its structure ? 1. Flubendiamide 2. Cypermethrin 3. Clorantraniliprole 4. Parathion A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

118	1003348	Fluazifop belongs to which group of herbicide ? 1. Phenoxy phenoxy acids 2. Dinitroaniline 3. Phenoxy acid derivatives 4. Sulfonylurea A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

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Objective Question				
119	1003349	During extraction of phytochemicals from plant materials, moisture content in the material influences most is 1. Solubility of extraction solvent 2. Partition coefficient of extraction solvent 3. Volatility of extraction solvent 4. Polarity of extraction solvent A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
120	1003350	Molecular sieve is a material containing tiny pores of a precise and uniform size that is used 1. Adsorbent for gases and liquid 2. For sieving nanomaterials 3. For purification of large molecules 4. To separate different size solid particles A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

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